**Commonwealth of Kentucky**
**Environmental and Public Protection Cabinet**
**Department for Environmental Protection**
**Division for Air Quality**
**803 Schenkel Lane**
**Frankfort, Kentucky 40601**
**(502) 573-3382**

**Final**

# AIR QUALITY PERMIT

**Issued under 401 KAR 52:030**

| | |
|---|---|
| **Permittee Name:** | **Ashland Inc.** |
| **Mailing Address:** | **21St and Front Street**<br>**Ashland, Kentucky 41101** |
| **Source Name:** | **The Valvoline Company** |
| **Mailing Address:** | **21st and Front Street**<br>**Ashland, Kentucky 41101** |
| **Source Location:** | **21st and Front Street**<br>**Ashland, Kentucky 41101** |
| **Permit ID:** | **F-05-021-R1** |
| **Agency Interest #:** | **40443** |
| **Activity ID:** | **APE20040001** |
| **Review Type:** | **Conditional Major, Construction/Operating** |
| **Source ID:** | **21-019-00110** |
| **Regional Office:** | **Ashland Regional Office**<br>**1550 Wolohan Drive, Suite #1**<br>**Ashland, KY 41102-8942**<br>**(606) 929-5285** |
| **County:** | **Boyd** |
| **Application Complete Date:** | **September 29,2006** |
| **Issuance Date:** | **August 1, 2005** |
| **Revision Date:** | **November 15, 2006** |
| **Expiration Date:** | **August 1, 2010** |

**John S. Lyons, Director**
**Division for Air Quality**

*Revised 09/29/06*

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| **F-05-021** | **Initial Issuance** | **40443** | **4/19/02** | **August 1, 2005** | **Initial Construction Permit** |
| **F-05-021R1** | **Revision #1** | **APE20060002** | **10/15/2006** | **11/15/06** | **Permit Revision** |

## SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**Test Engines**

**01 (--) Gasoline Test Engine III**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Vehicles.
Make: General Motors
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 200 / 3.8L
Construction Date: 1999

**02 (--) Gasoline Test Engine IV**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Vehicles.
Make: Nissan
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 90 / 2.4L (Horsepower limited to less than 50)
Construction Date: 1999

**03 (--) Gasoline Test Engine VIII**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Vehicles.
Make: Cooperative Lubrication Research (Oil Test Engine)
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 25 / Not Listed
Construction Date: 1999

**04 (--) Gasoline Test Engine DB**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Vehicles.
Make: Not Listed
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 125 / Not Listed (Horsepower limited to less than 50)
Construction Date: 2006

**05 (--) Gasoline Test Engine V**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Trucks.
Make: Ford
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 190 / 4.6L
Construction Date: 1999

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Test Engines (Continued)**

**06 (--) Gasoline Test Engine BL-2**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Trucks.
Make: Not Listed
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 190 / Not Listed
Construction Date: 1999

**07 (--) Gasoline Test Engine VI**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Trucks.
Make: Ford
Fuel: Unleaded gasoline only.
Horsepower / Displacement: 190 / 4.6L (Horsepower limited to less than 50)
Construction Date: 1999

**08 (--) Diesel Test Engine ISB**
**Description:** Internal Combustion Reciprocating Test Engine for Heavy Duty Diesel Powered Vehicles.
Make: Not Listed
Fuel: Diesel fuel only.
Horsepower / Displacement: 175 / 5.9L
Construction Date: 1999

**09 (--) Diesel Test Engine 1**
**Description:** Internal Combustion Reciprocating Test Engine for Heavy Duty Diesel Powered Vehicles.
Make: Caterpillar
Fuel: Diesel fuel only.
Horsepower / Displacement: 75 / Not Listed
Construction Date: 1999

**10 (--) Leaded Test Engine NASCAR**
**Description:** Internal Combustion Reciprocating Test Engine for Heavy Duty Gasoline Powered Vehicles.
Make: Not Listed (NASCAR Racing Engine)
Fuel: Leaded racing gasoline only.
Horsepower / Displacement: 750 / Not Listed
Construction Date: 1999

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Test Engines (Continued)**

**12 (--) Gasoline Test Engine IVD**
**Description:** Internal Combustion Reciprocating Test Engine for Light Duty Gasoline Powered Vehicles.
Make: None.
Fuel: None.
Horsepower / Displacement: None.
Construction Date: Stand constructed in 1994. No engine proposed to date.

**13 (--) Gasoline Test Marine Engine ME1**
**Description:** Internal Combustion Reciprocating Test Engine for Non-road Gasoline Powered Marine
Make: Defender/Honda BF225
Fuel: Unleaded gasoline only.
Horsepower / Displacement: Not Listed
Construction Date: Proposed

**14 (--) Gasoline Test Marine Engine ME2**
**Description:** Internal Combustion Reciprocating Test Engine for Non-road Gasoline Powered Marine
Make: Defender/Honda BF225
Fuel: Unleaded gasoline only.
Horsepower / Displacement: Not Listed
Construction Date: Proposed

**APPLICABLE REGULATIONS:**
401 KAR 59:010, *New process operations,* applies to each of the Test Engines.

**1. Operating Limitations:**

a. To preclude 401 KAR 52:020, test engines III, IV, VIII, VE, V, BL-2, ISB, 1, and NASCAR shall be disassembled, inspected, and rebuilt prior to performing a subsequent test in order to support use of the "50,000 Mile Emission Level" emission factors from AP-42, Volume II, Appendix H.

b. Before installing an engine on test stand IVD, the permittee shall apply for and receive a permit revision granting its installation and operation.

**Compliance Demonstration Method:** See the **Monitoring**, **Recordkeeping**, and **Reporting Requirements**, below.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Test Engines (Continued)**

**2.** **Emission Limitations:**

a. See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

b. The opacity of visible emissions from any of the Test Engines shall not equal or exceed 20 percent. [401 KAR 59:010, Section 3(1)(a)]

**3.** **Testing Requirements:** Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

**4.** **Specific Monitoring Requirements:** The **Specific Recordkeeping Requirements**, below, dictate the monitoring requirements.

**5.** **Specific Recordkeeping Requirements:**

a. Maintain records of the type of fuel combusted in each engine for each test.

b. Maintain records of the test miles accumulated on each engine per month.

c. Maintain records of the date and duration of each test for each engine.

d. Maintain records of the date and summary of maintenance actions for each test engine overhaul.

e. Using the information from **Specific Recordkeeping Requirement 5.a.** and **5.b.**, above, and the appropriate emission factor for road engine from AP-42, Volume II, Appendix H, and for non-road marine testing engine EPA 420-R-05-019, calculate and record the emissions from each engine per month.

**6.** **Specific Reporting Requirements:** The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with **Section F.5.** and **F.6.** of this permit:

a. Summary reports of all monitoring/recordkeeping requirements.

b. Summary reports of any routine maintenance performed on each test engine other than the required overhaul between engine tests.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System**

**11 (--) Air Sparge/Soil Vapor Extraction System (AS/SVE)**
**Description:** Hydrocarbon-impacted soil and groundwater remediation system.
Sparge flow / pressure capability: 110 scfm / 15 psig.
Vapor extraction vacuum: 300 scfm
Construction Date: 2005 (Anticipated)

**Control:** Carbon Adsorber
Manufacturer: Calgon
Model: Vapor Pac
Description: Two 1800-pound granular activated carbon beds regenerated by carbon bed replacement.
Date constructed: 2005 (Anticipated)

**APPLICABLE REGULATIONS:**
401 KAR 63:020, *Potentially hazardous matter or toxic substances,* applies to the emissions from the AS/SVE.

**NON-APPLICABLE REGULATIONS:**
401 KAR 63:002, incorporating by reference 40 CFR 63, Subpart GGGGG (63.7880 to 63.7957), *National Emission Standards for Hazardous Air Pollutants: Site Remediation*, does not directly apply to the AS/SVE since the source is minor for HAP. However, many requirements from this standard were deemed necessary in order to ensure proper operation of the Carbon Adsorber, and compliance with the source's requested Conditional Major status.

**1. Operating Limitations:**
The permittee shall provide the utmost care and consideration, in the handling of hazardous matter or toxic substances, to the potentially harmful effects of the emissions resulting from such activities. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:** Compliance with the above Operating Limitation will be demonstrated by the conditions listed below.

a. The minimum pollutant removal efficiency of the Carbon Adsorber shall be 99%, or the Total Organic Compound (TOC) concentration from the outlet of the Carbon Adsorber shall be less than 20 ppmv (less methane and ethane).
b. Emissions from the AS/SVE shall be routed to the Carbon Adsorber at all times.
c. The Carbon Adsorber shall be operating at all times that the AS/SVE is operating. [40 CFR 63.7925(b)]
d. Use a seal or locking device to ensure that by-pass valve "BV-2" is in the closed position at all times that the AS/SVE is operating. [40 CFR 63.7927(a)(2)(ii)]
**e.** Meet the carbon bed replacement requirements in either paragraph e.(1), (2), or (3), below: [40 CFR 63.7925(h)(2)(i) and 40 CFR 63.7925(h)(3)(i)]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**1. Operating Limitations: (Continued)**

(1) Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation. See **Testing Requirement 3.f.**, below, for design evaluation criteria.

(2) Immediately replace the carbon canister or carbon in the control device when the monitoring device indicates breakthrough has occurred according to the requirements in 40 CFR 63.693(d)(4)(iii)(A). Specifically, monitor the concentration level of the organic compounds in the exhaust vent from the carbon adsorption system on a regular schedule, and when carbon breakthrough is indicated, immediately replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon. Measurement of the concentration level of the organic compounds in the exhaust vent stream must be made with a detection instrument that is appropriate for the composition of organic constituents in the vent stream and is routinely calibrated to measure the organic concentration level expected to occur at breakthrough. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established during design evaluation, whichever is longer. See **Testing Requirement 3.f.**, below, for design evaluation criteria.

(3) Replace the carbon canister or carbon in the control device at regular intervals according to the requirements in 40 CFR 63.693(d)(4)(iii)(B). Specifically, replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established during design evaluation. See **Testing Requirement 3.f.**, below, for design evaluation criteria.

f. Meet the disposal requirements for spent carbon in 40 CFR 63.693(d)(4)(ii) (listed below). [40 CFR 63.7925(h)(2)(ii) and 40 CFR 63.7925(h)(3)(ii)]

40 CFR 63.693(d)(4)(ii):

(ii) The spent carbon removed from the carbon adsorption system must be either regenerated, reactivated, or burned in one of the units specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(G) of this section.

(A) Regenerated or reactivated in a thermal treatment unit for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart X.

(B) Regenerated or reactivated in a thermal treatment unit equipped with and operating air emission controls in accordance with this section.

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**1. Operating Limitations: (Continued)**

(C) Regenerated or reactivated in a thermal treatment unit equipped with and operating organic air emission controls in accordance with a national emission standard for hazardous air pollutants under another subpart in 40 CFR part 63 or 40 CFR part 61.
(D) Burned in a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart O.
(E) Burned in a hazardous waste incinerator for which the owner or operator has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.
(F) Burned in a boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 266, subpart H.
(G) Burned in a boiler or industrial furnace for which the owner or operator has designed and operates the unit in accordance with the interim status requirements of 40 CFR part 266, subpart H.

g. Repair defects to hard-piping, ductwork, connections, fans, and blowers, as applicable, that convey gas or vapor to the Carbon Adsorber according to the requirements in 40 CFR 63.695(c)(3) (listed below). [40 CFR 7928(b)(3)]

40 CFR 63.695(c)(3):
(3) The owner or operator shall repair all detected defects as follows:
(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.
(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the owner or operator must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect must be completed before the process or unit resumes operation.
(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.
(B) The owner or operator determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.
(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 63.696 of this subpart. [See **Recordkeeping Requirement 5.a.** for the relevant requirements.]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

2. **Emission Limitations:** See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

3. **Testing Requirements:**
   a. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the Cabinet. [401 KAR 63:020, Section 3]
   b. The permittee shall provide written notification of the performance test in accordance with section G.d.7. of this permit.
   c. Pursuant to Section VII.1.(2) of the "Policy Manual of the Division of Air Pollution Control" incorporated by reference in 401 KAR 50:016, Section 1(1), when demonstration of compliance, through performance test, is made at a production rate less than the maximum specified in the application form, the permit shall be conditioned to limit the production rate to no more than 110% of the average test rate.
   d. Conduct a performance test or design evaluation to demonstrate the Carbon Adsorber's initial compliance with the percent reduction or TOC concentration requirement in **Compliance Demonstration Method 1.a.**, above. [40 CFR 63.7941(a)]
   e. If you choose to conduct a performance test to demonstrate initial compliance, then conduct the test according to paragraphs e.(1) – e.(3), below. [40 CFR 63.7941(b)(1)-(3)]
      (1) Conduct three separate test runs for each performance test, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.
      (2) Do not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
      (3) Conduct each performance test using the test methods and procedures in 40 CFR 63.694(l) (relevant portions listed below).

      40 CFR 63.694(l):
      (l) Control device performance test procedures.
      (1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites at the inlet and outlet of the control device.
      (i) To determine compliance with a control device percent reduction requirement, sampling sites shall be located at the inlet of the control device as specified in paragraphs (l)(1)(i)(A) and (l)(1)(i)(B) of this section, and at the outlet of the control device.
      (A) The control device inlet sampling site shall be located after the final product recovery device.
      (B) [Not listed.]
      (ii) [Not listed.]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**3. Testing Requirements: (Continued)**

(2) The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.
(3) To determine compliance with the control device percent reduction requirement, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A of this chapter; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 in 40 CFR part 63, appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:
(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.
(ii) The mass rate of either TOC (minus methane and ethane) or total HAP ($E_i$ and $E_o$ ,respectively) shall be computed.
(A) The following equations shall be used:

$$E_i = K_2 \times Q_i \times \sum_{j=1}^{n} \left( C_{ij} \times M_{ij} \right)$$

$$E_o = K_2 \times Q_o \times \sum_{j=1}^{n} \left( C_{oj} \times M_{oj} \right)$$

Where:
$C_{ij}$, $C_{oj}$ = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.
$E_i$, $E_o$ = Mass rate of TOC (minus methane and ethane) or total HAP at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour.
$M_{ij}$, $M_{oj}$ = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.
$Q_i$, $Q_o$ = Flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.
$K_2$ = Constant, $2.494 \times 10^{-6}$ (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.
(B) When the TOC mass rate is calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, appendix A shall be summed using the equation in paragraph (l)(3)(ii)(A) of this section.
(C) [Not listed.]
(iii) The percent reduction in TOC (minus methane and ethane) or total HAP shall be calculated as follows:

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**3. Testing Requirements: (Continued)**

$$R_{cd} = \frac{E_i - E_o}{E_i} \times 100$$

where:
$R_{cd}$=Control efficiency of control device, percent.
$E_i$=Mass rate of TOC (minus methane and ethane) or total HAP at the inlet to the control device as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.
$E_o$=Mass rate of TOC (minus methane and ethane) or total HAP at the outlet of the control device, as calculated under paragraph (l)(3)(ii) of this section, kilograms TOC per hour or kilograms HAP per hour.

(iv) [Not listed.]

(4) To determine compliance with the … [TOC] concentration limit of … [**Compliance Demonstration Method 1.a.**, above], the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure … TOC (minus methane and ethane) …. Alternatively, any other method or data that has been validated according to Method 301 in appendix A of this part, may be used. The following procedures shall be used to calculate parts per million by volume concentration, …:

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(ii) [Not listed.]

(A) The TOC concentration ($C_{TOC}$) is the sum of the concentrations of the individual components and shall be computed for each run using the following equation:

$$C_{TOC} = \sum_{i=1}^{x} \frac{\sum_{j=1}^{n} C_{ji}}{x}$$

Where:
$C_{TOC}$=Concentration of total organic compounds minus methane and ethane, dry basis, parts per million by volume.
$C_{ji}$=Concentration of sample components j of sample i, dry basis, parts per million by volume.
n=Number of components in the sample.
x=Number of samples in the sample run.

(B) [Not listed.]

(iii) [Not listed.]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**3. Testing Requirements: (Continued)**

f. If a design evaluation is chosen to demonstrate initial compliance instead of a performance test, then perform a design evaluation according to the general requirements in 40 CFR 63.693(b)(8) (listed below) and the specific requirements in 40 CFR 63.693(d)(2)(ii) (listed below) for a carbon adsorption system (including establishing carbon replacement schedules and associated requirements). [40 CFR 63.7941(c)]

40 CFR 63.693(b)(8):
(8) In the case when an owner or operator chooses to use a design analysis to demonstrate compliance of a control device with the applicable performance requirements …, the Administrator may request that the design analysis be revised or amended by the owner or operator to correct any deficiencies identified by the Administrator. If the owner or operator and the Administrator do not agree on the acceptability of using the design analysis (including any changes requested by the Administrator) to demonstrate that the control device achieves the applicable performance requirements, then the disagreement must be resolved using the results of a performance test conducted by the owner or operator in accordance with the requirements of 40 CFR 63.694(l) of this subpart. The Administrator may choose to have an authorized representative observe the performance test conducted by the owner or operator. Should the results of this performance test not agree with the determination of control device performance based on the design analysis, then the results of the performance test will be used to establish compliance with this subpart.

40 CFR 693(d)(2)(ii):
(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in … paragraph … (d)(2)(ii)(B) [listed below] of this section as applicable to the carbon adsorption system design.

40 CFR 693(d)(2)(ii)(B):
(B) For a nonregenerable carbon adsorption system (e.g., a carbon canister), the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total carbon working capacity of the control device and emission point operating schedule.

**4. Specific Monitoring Requirements:**

a. Monitor the concentration of organic compounds in the exhaust vent stream according to the requirements in 40 CFR 63.693(d)(4)(iii)(A). [40 CFR 63.7927(c)]

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**4. Specific Monitoring Requirements: (Continued)**

[The 40 CFR 63.693(d)(4)(iii)(A) requirements are listed in **Compliance Demonstration Method 1.e.(2)**, above.]

b. Inspect the position of by-pass valve "BV-2" and the seal or locking device condition at least monthly according to 40 CFR 63.693(c)(2)(ii) (listed below). [40 CFR 63.7927(a)(2)(ii)]

40 CFR 63.693(c)(2)(ii):

(ii) If a seal or locking device is used …, the device shall be placed on the mechanism by which the bypass device position is controlled (*e.g.,* valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve.

c. For the monitoring required above, develop and make available for inspection upon request, a site-specific monitoring plan that addresses the following: [40 CFR 63.7935(g)(1) – (3)]

(1) Installation of the … sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations).

d. Monitor the hard-piping, ductwork, connections, fans, and blowers, as applicable, that convey gas or vapor to the Carbon Adsorber after a repair or replacement using the procedures in 40 CFR 63.694(k) (listed below). [40 CFR 63.7928(b)(1)]

40 CFR 63.694(k):

(k) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**4. Specific Monitoring Requirements: (Continued)**

(2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air); and

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.

(6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (k)(8)(i) or (k)(8)(ii) of this section.

(i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (k)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**4. Specific Monitoring Requirements: (Continued)**

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (k)(9)(i) and (k)(9)(ii) of this section.
(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 500 ppmv.
(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 10,000 ppmv.

e. Monitor the hard-piping, ductwork, connections, fans, and blowers, as applicable, that convey gas or vapor to the Carbon Adsorber at least annually according to the requirements in 40 CFR 63.695(c)(1)(ii) (relevant portions listed below). [40 CFR 63.7928(b)(1)]

40 CFR 63.695(c)(1)(ii):
(ii) After initial startup, the owner or operator shall inspect and monitor the closed-vent system as follows:
(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The owner or operator shall monitor a component or connection using the procedures specified in 40 CFR 63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).
(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in 40 CFR 63.694(k) of this subpart to demonstrate that components or connections operate with no detectable organic emissions.
(C) [Not listed.]
(D) [Not listed.]

**5. Specific Recordkeeping Requirements:**

a. Maintain records of each performance test or design evaluation required by **Testing Requirement 3.d.** in accordance with **Section F.2.** of this permit.

b. Keep records of each TOC concentration reading as required by **Specific Monitoring Requirement 4.a.**, above.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**5. Specific Recordkeeping Requirements: (Continued)**

c. Keep records of each Performance evaluation plan, including previous (i.e., superseded) versions of the plan as required by **Specific Monitoring Requirement 4.b.**, above. [40 CFR 63.7952(b)(2)]

d. Maintain records to document compliance with the carbon bed replacement and disposal work practice standards required by **Compliance Demonstration Method 1.e.** and **1.f.** in accordance with **Section F.2.** of this permit. [40 CFR 63.7928(f)(3) and (g)(3)]

e. Record, on a semiannual basis, the information in paragraphs e.(1) and e.(2) for planned routine maintenance operations that would require the Carbon Adsorber not to meet the Operating Limitation. [40 CFR 63.7952(d)]

(1) A description of the planned routine maintenance that is anticipated to be performed for the Carbon Adsorber during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(2) A description of the planned routine maintenance that was performed for the Carbon Adsorber during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the Operating Limitation, due to planned routine maintenance.

f. Keep records of each inspection required by **Specific Monitoring Requirement 4.c.** and **4.d.** that include the information specified below: [40 CFR 63.7928(b)(4)(i) – (iii)]

(1) A closed vent system identification number (or other unique identification description selected).

(2) Date of each inspection.

(3) If a defect is detected during an inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

g. Using the information obtained from applicable Testing and Monitoring Requirements, calculate and record the emissions from the AS/SVE each month.

**6. Specific Reporting Requirements:**

a. Pursuant to Section VII 2.(1) of the "Policy Manual of the Division of Air Pollution Control" incorporated by reference in 401 KAR 50:016, Section 1.(1), at least one month prior to the date of required performance tests, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office.

b. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Remediation System (Continued)**

**6. Specific Reporting Requirements: (Continued)**

c. For each initial compliance demonstration that includes a performance test or design evaluation, submit the performance test results before the close of business on the 45th calendar day following the completion of the performance test as specified in **Section F.11.** of this permit. Submit the complete design evaluation and supporting documentation.

d. If there is a deviation from an operating limitation (including any periods when emissions bypassed the add-on-control device and were diverted to the atmosphere), submit a report as specified in **Section F.8.** of this permit.

**7. Specific Control Equipment Operating Conditions:** See the above requirements.

## SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

| Description | Generally Applicable Regulation |
|---|---|
| 1. 28"G", 8000 gal. Gasoline UST, 1986 | 401 KAR 59:050 |
| 2. 29"J", 8000 gal. Gasoline UST, 1990 | 401 KAR 59:050 |
| 3. 30A, 2000 gal. Gasoline UST, 1996 | 401 KAR 59:050 |
| 4. 30B, 2000 gal. Gasoline UST, 1996 | 401 KAR 59:050 |
| 5. 31A, 2000 gal. Gasoline UST, 1996 | 401 KAR 59:050 |
| 6. 31B, 2000 gal. Diesel UST, 1996 | 401 KAR 59:050 |
| 7. 32A, 2000 gal. Gasoline UST, 1996 | 401 KAR 59:050 |
| 8. 32B, 2000 gal. Gasoline UST, 1996 | 401 KAR 59:050 |
| 9. 33L, 500 gal. Gasoline AST | None. |
| 10. Two 550 gal. Diesel AST's | None. |
| 11. B-1, 0.4 mmBtu/hr Diesel Space Heater, 1976 | None. |
| 12. B-2, 0.4 mmBtu/hr Diesel Space Heater, 1976 | None. |
| 13. B-3, 0.4 mmBtu/hr Diesel Space Heater, 1976 | None. |
| 14. B-4, 0.4 mmBtu/hr Diesel Space Heater, 1976 | None. |
| 15. Twelve Natural Gas Space Heaters (All less than 0.4 mmBtu/hr) | None. |
| 16. Parts Washer MS-1, Cold Cleaning Degreaser | None. |
| 17. Parts Washer NO-1, Cold Cleaning Degreaser | None. |
| 18. Parts Washer P-1, Cold Cleaning Degreaser | None. |
| 19. Parts Washer SK1, Cold Cleaning Degreaser | None. |

## SECTION C - INSIGNIFICANT ACTIVITIES (Continued)

| Description | Generally Applicable Regulation |
|---|---|
| 20. Parts Washer SK2, Cold Cleaning Degreaser | None. |
| 21. Two Honing Machines (metal machining) | None. |
| 22. Engine Maintenance (lubricant usage) | None. |
| 23. Laboratory Fume Hoods | None. |
| 24. Induced Draft Cooling Tower | None. |
| 25. Bead Blaster (self-contained) | None. |

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Carbon Monoxide (CO), and Hazardous Air Pollutant (HAP) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. **Source Emission Limitations:**
   a. The total annual source-wide emissions shall not exceed the following limitations on a twelve month (12) rolling total:
      (1) Carbon Monoxide (CO) emissions shall not exceed 90 tons per year.
      (2) Emissions of any single hazardous air pollutants (HAP) shall not exceed 9.0 tons per year.
      (3) Emissions of combined hazardous air pollutant (HAP's) shall not exceed 22.5 tons per year.
   b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

   **Compliance Demonstration Method:**
   a. Calculate annual source-wide emissions for each month of the previous 12-month period (i.e.: for the month of January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January). The monthly compliance demonstration shall include, at a minimum, the monthly and 12-month rolling CO, individual HAP, and combined HAP emissions from the following operations:
      (1) All Test Engine operations.
      (2) All AS/SVE operations.
      (3) All Insignificant Activities.

      All emissions calculations shall be based on standard U.S. EPA methodology and test results (i.e.: most current TANKS program for tanks, AP-42 emissions factors as mentioned in Section B for the Test Engines, appropriately summing the product of the weight percent of each HAP in the organic material emissions for tanks and Test Engine emissions as determined by Speciate 3.2, AS/SVE emission rates determined from testing, etc.).
   b. Demonstration of compliance with the source-wide emission limitations in paragraph **3.a.**, above, shall also serve as the demonstration of compliance with the air toxic limitation in paragraph **3.b.**, above.

4. **Source Recordkeeping Requirements:** The permittee shall retain a record of each source-wide monthly compliance demonstration completed in accordance with paragraph **3.a.**, above.

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

5. **Source Reporting Requirements:**

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with **Section F.5.** and **F.6.** of this permit:

a. A summary report containing a copy of all monthly source-wide compliance demonstration records (as provided above) during the previous reporting period.

b. Identification of any deviations from source-wide permit requirements that occurred during the reporting period.

## SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place (as defined in this permit), and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.

7 In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:

a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.

b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.

8 The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

9 Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:

a. Identification of each term or condition;

b. Compliance status of each term or condition of the permit;

c. Whether compliance was continuous or intermittent;

d. The method used for determining the compliance status for the source, currently and over the reporting period.

e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be postmarked by January 30th of each year. **Annual compliance certifications should be mailed to the following addresses:**

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

| | |
|---|---|
| Division for Air Quality<br>Ashland Regional Office<br>1550 Wolohan Dr., Suite 1<br>Ashland, KY 41102-8942 | Division for Air Quality<br>Central Files<br>803 Schenkel Lane<br>Frankfort, KY 40601 |

10. In accordance with 401 KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit.

11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
    a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
        i. The size and location of both the original and replacement units; and
        ii. Any resulting change in emissions;
    b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
    c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
    d. The replacement unit shall comply with all applicable requirements; and
    e. The source shall notify Regional office of all shutdowns and start-ups.
    f. Within six (6) months after installing the replacement unit, the owner or operator shall:
        i. Re-install the original unit and remove or dismantle the replacement unit; or
        ii. Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].

12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in this permit; and
    b. Non-applicable requirements expressly identified in this permit.

18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the Air Sparge/Soil Vapor Extraction System in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the final permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration ***(test)*** on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7, and 8 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test***

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
   d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## SECTION H - ALTERNATE OPERATING SCENARIOS

None.

## SECTION I - COMPLIANCE SCHEDULE

None.